



FASTLANE[®]

By Endless Pools, Inc.

OWNER'S MANUAL
Wall Mount Installation



Section 1**GENERAL OVERVIEW OF A WALL MOUNT FASTLANE**

The Wall Mount Fastlane® swimming machine by Endless Pools, Inc. is a hydraulically-powered system that creates a smooth, adjustable-speed swim current in a conventional pool. The Swim Unit fastens to the wall of the pool using the bracket provided. Two 1" polyethylene pipes which serve as conduits run under the pool deck to a remotely located, 5-horsepower, hydraulic Power Unit, as shown in Figure 1.1. It is best if the Power Unit is within 25' of the Swim Unit to minimize pressure loss. Inside the 1" poly pipe, two 3/8" hydraulic hoses carrying a non-food grade, biodegradable vegetable oil run between the hydraulic Power Unit and the Fastlane Swim Unit, thus eliminating the need for electricity poolside. When pumped at high pressure, this hydraulic fluid creates a swim current by turning the shaft of a submerged stainless steel hydraulic motor in the Fastlane Swim Unit, which in turn rotates a 16" diameter propeller. The swim current produced is wider than your body and deeper than your stroke — far superior to currents created by one or more jets. The Power Unit is activated using a 3-button radio frequency remote control that can turn the unit on and off and adjust the speed. An optional 6" LED swim pace display is available to monitor your speed. Also, customers often place our swim mirror on the bottom of the pool to observe their swim stroke.

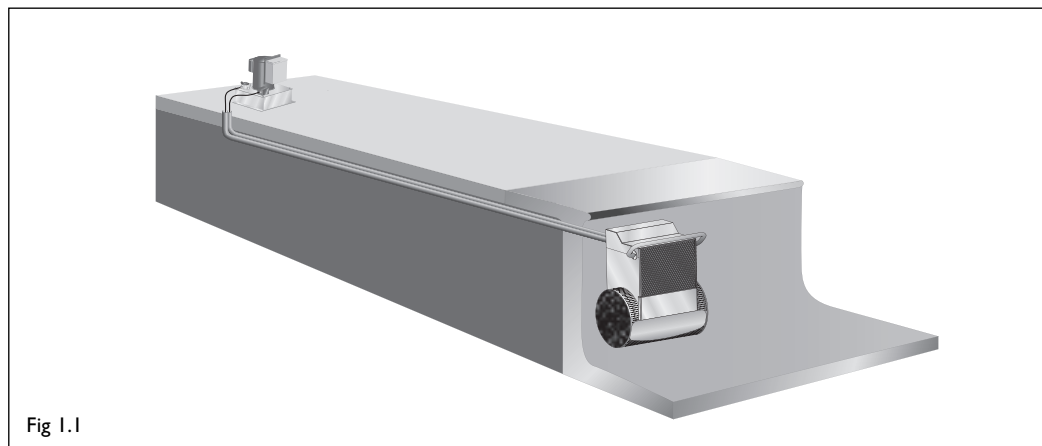
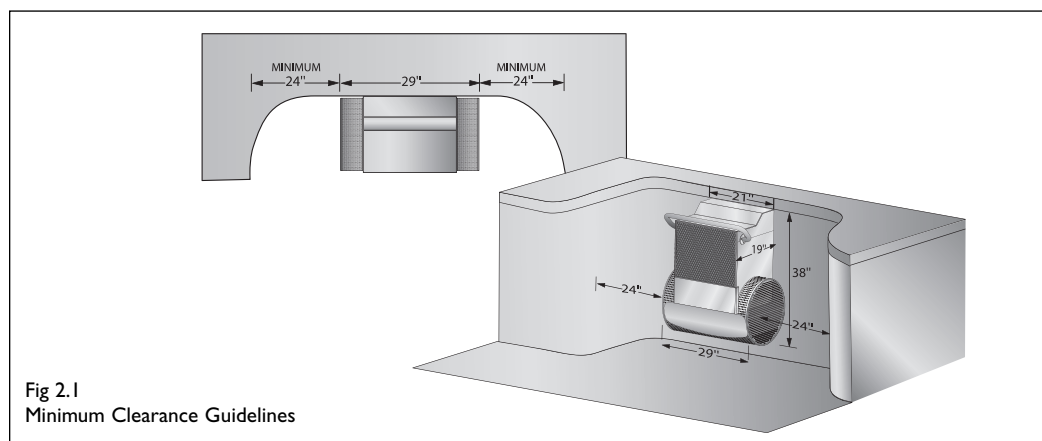


Fig 1.1

Section 2**CHOOSING A LOCATION FOR YOUR WALL MOUNT FASTLANE**

The Fastlane can fit in virtually any swimming pool. For optimal water flow, we recommend that you allow at least 12 feet between the wall on which the Fastlane is installed and the opposing wall in line with the Swim Unit. The Fastlane has more than 9 square feet of water intake to eliminate any entrapment hazards. The water depth where the Fastlane is installed must be at least 35" deep. In addition, the Fastlane must be installed no closer than 24" from any adjacent wall as shown in Figure 2.1, Minimum Clearance Guidelines.

When choosing a location for your Fastlane, you should also consider the route for the 1" poly pipe to run back to the Power Unit. The Power Unit needs to sit on a solid, level surface, preferably not on wet ground, and requires a 30-amp, 220-volt GFCI electric service. For UK and international electrical requirements, please refer to Section 8. The optional Outdoor Power Unit with Weather Guard may be located outside, but should not be subject to driving rain. Typically, the Power Unit is located with the other pool equipment and, if possible, long hydraulic runs should be avoided because of pressure loss. If you wish to have a 1" poly pipe greater than 25', you must transition from 3/8" hydraulic hoses to 1/2" run hoses with the addition of a junction box as reviewed in Section 5.

Fig 2.1
Minimum Clearance Guidelines

Section 3**RECEIVING YOUR WALL MOUNT FASTLANE**

The Wall Mount Fastlane is comprised of six (7) parcels. All items will be shipped via UPS Ground.

ITEMS SHIPPED UPS

Parcel 1: Wall Mount Bracket Assembly
 Parcel 2: Two (2) 24' 6" rolls of 1" Polyethylene Pipe
 Parcel 3: 5-hp Power Unit with 2 Wireless Remote Controls and Antenna located inside the controller (Heavy Box) **Note:** If the Outdoor Power Unit was purchased as an option, the Weather Guard will come pre-assembled to the Power Unit.
 Parcel 4: Five (5) Gallons of Hydraulic Fluid (Non-Food Grade Vegetable Oil)
 Parcel 5: Fastlane Swim Unit – propulsion housing
 Parcel 6: Fastlane Swim Unit – base with pre-installed, 25 feet of hydraulic hoses, grab bar
 Parcel 7: Wall mount accessories kit – protective hat channels, Fastlane lid and hardware kit

OPTIONAL EQUIPMENT

- Outdoor Power Unit with Weather Guard
- Floor Mirror
- Swim Pace Display
- Underwater Camera
- Hi-Performance 6-hp Power Unit (in lieu of 5-hp Power Unit)
- Junction Box Kit (refer to Section 5)

HARDWARE KIT**PACKED INSIDE THE ACCESSORIES KIT:**

- Thirty (30) 3/4" stainless steel screws for Fastlane Unit Assembly
- Owner's manual kit with two (2) -8 Female JIC/-6 Male JIC Adapters

Grab Bar Hardware Kit includes:

- Six (6) 3/4" stainless steel screws
- Six (6) stainless steel self-locking nuts

Section 4**WALL MOUNT BRACKET AND 1" POLYETHYLENE PIPE INSTALLATION**

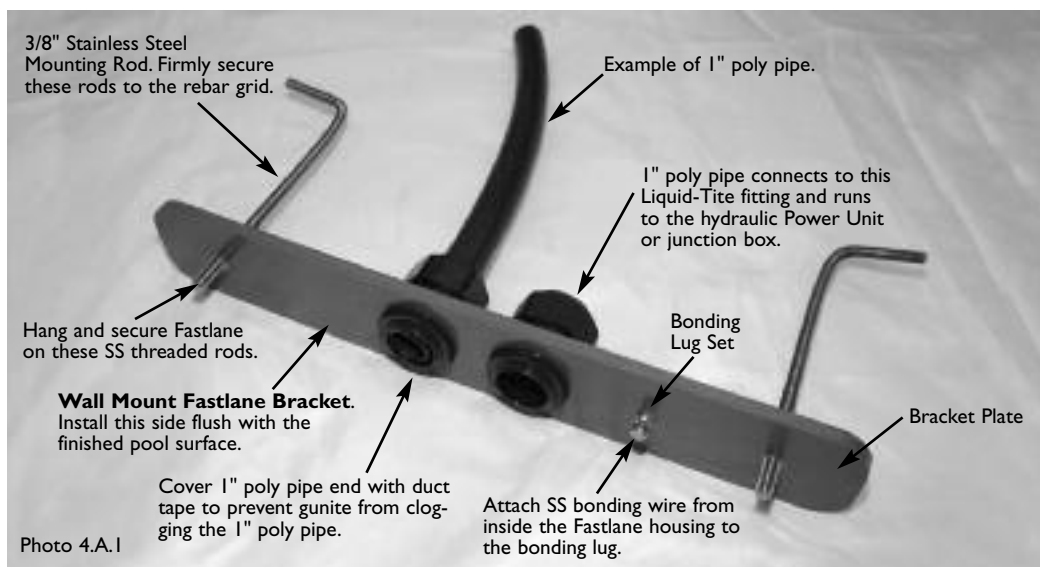
NOTE: PLEASE READ INSTRUCTIONS FULLY BEFORE BEGINNING BRACKET INSTALLATION.

4.A. Gunitite/Concrete Pool

If the pool being constructed is gunitite or concrete, please follow the instructions below.

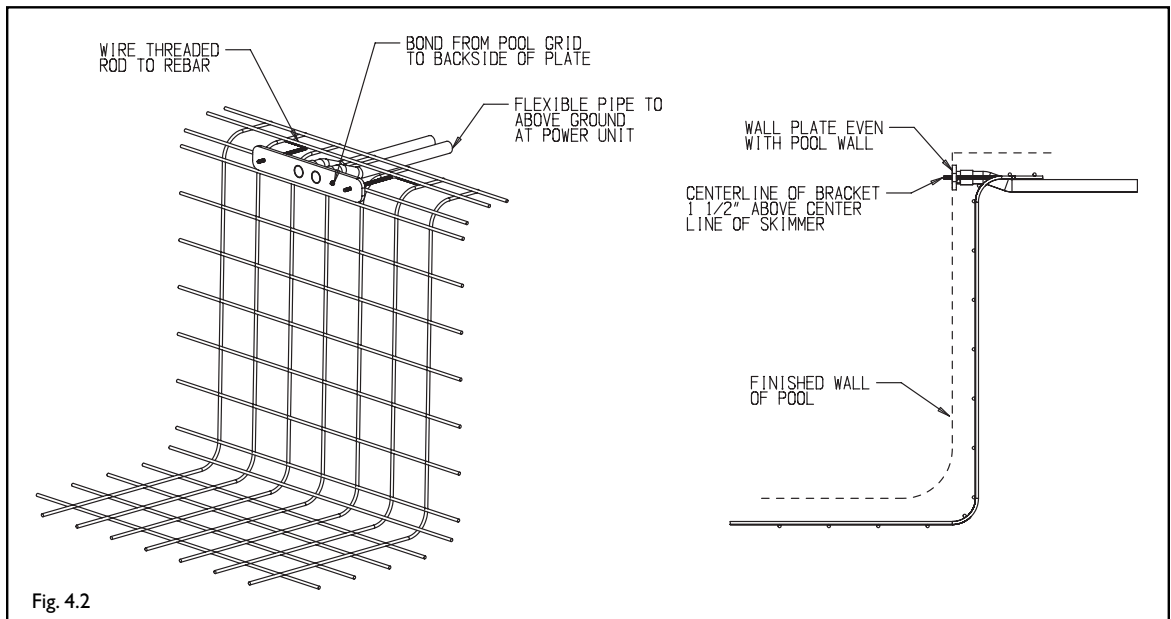
Parcel 1 includes the Wall Mount Fastlane bracket for concrete or gunitite pools. Two (2) 24' 6" rolls of 1" poly pipe are shipped separately. The standard bracket is comprised of the following components (refer to Photo 4.A.1):

- Two (2) 3/8" threaded 316L stainless steel mounting rods with hardware
- One (1) 3/8" PVC bracket plate
- Two (2) thru-wall Liquid-Tite fittings
- One (1) bonding lug set

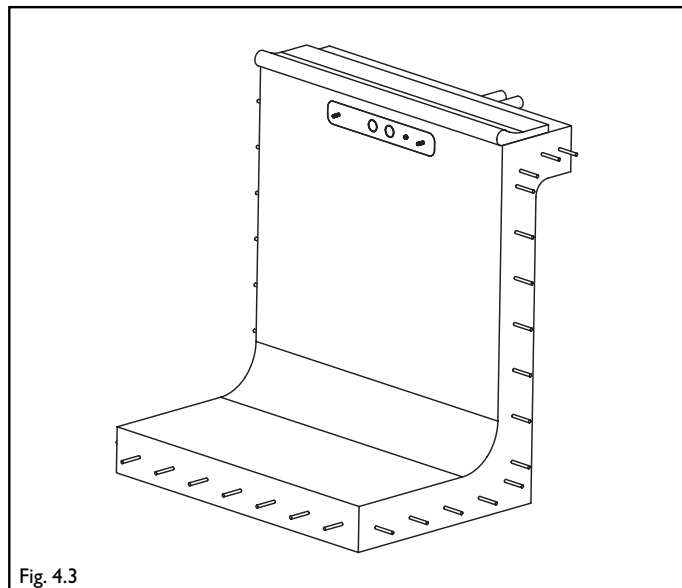


NOTE: Two (2) 1-1/2" couplings have been included as an option for use with 1-1/2" PVC flex pipe as shown in Photo 4.A.2 (replaces the Liquid-Tite fittings for use with the provided 1" poly pipe).

The bracket is to be installed into the pool wall as shown in Figure 4.2 so that the two mounting rods are 1-1/2" above the intended waterline for the pool, which is typically halfway up the skimmer. (The bottom edge of the Wall Mount Bracket will sit along the pool's intended waterline.) The rods penetrate 1-1/4" to 1- 1/2" into the finished pool and will be used to hang the Wall Mount Fastlane. These rods must be tied back to the rebar of the bond beam in the pool and, once encased in concrete, will serve as a suitable hanger. Additionally, a #8 or larger, solid copper bonding wire must be connected from the pool bonding grid to the bonding lug located on back of the wall mount bracket.



Level and position the bracket so that the PVC surface of the bracket plate will be flush with the finished surface of the pool wall as shown in Figures 4.2 and 4.3. The area below the bracket plate should be no more than 5 degrees less than vertical down to at least 35" below the waterline. The Fastlane is 21" wide. Consequently, the 21" section of wall where the bracket is located should be straight or near straight. Any variations from this requirement should be discussed with your design representative. Additionally, it is imperative that the Fastlane not be installed less than 24" from an adjacent wall to allow for proper water flow. Please refer back to Figure 2.1, Minimum Clearance Guidelines, for clarification.

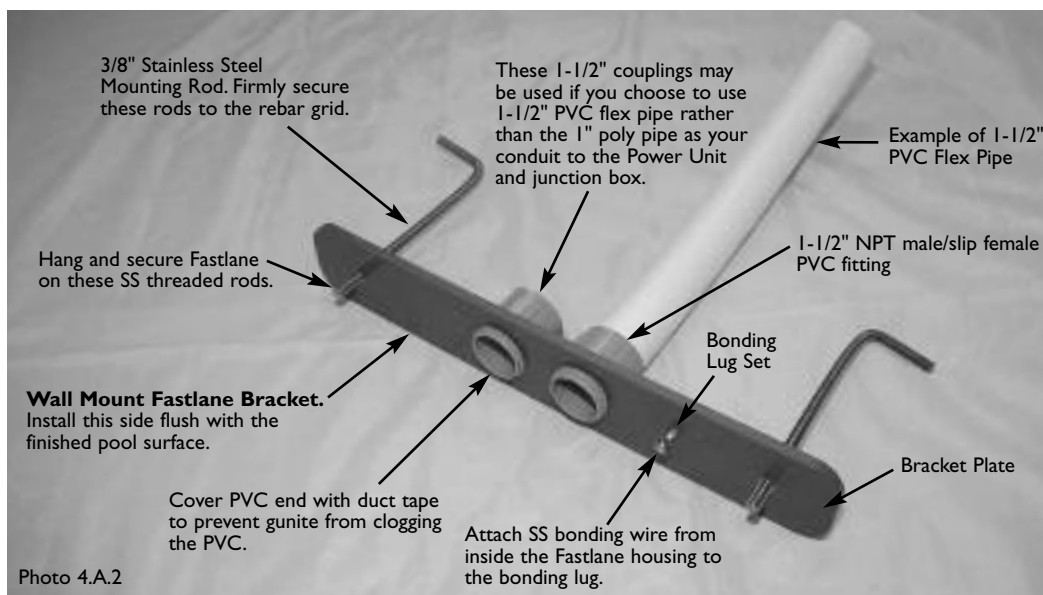


Install two (2) complete 1" poly pipes back to the Hydraulic Power Unit or junction box. The two (2) 1" poly pipes may be partially buried and/or covered with concrete. Care should be taken when rounding corners not to use tighter than 18" radius bends. **It is imperative that this 1" poly pipe not be kinked given the close tolerance of the fittings sliding through later (Section 10.4).** Do not use couplers with this 1" poly pipe, but

rather use a single length for each of the two hydraulic hoses that will run through them. The goal is to provide an easy route for each of the two 3/8" hydraulic hoses — a route free of obstructions and unlikely to bind. The hydraulic hoses may run on the surface outside the 1" poly pipe, but care must be taken not to damage them. It is always best to use the 1" poly pipe provided as it protects the hydraulic hoses from chafing as well as UV damage. The 1" poly pipe is chosen because of its slipperiness and the ease with which the 3/8" hydraulic hose slides through it. At the same time, this 1" poly pipe can be easily kinked which will make it difficult to slide the hydraulic hoses through later.

When planning for these two runs of 1" poly pipe, recognize that they penetrate the pool wall 1-1/2" above the waterline and as a consequence will be flooded if the water level rises to that point. **We strongly recommend that the 1" poly pipe rise to a point above which the water level will never rise to avoid any potential flooding.** This can be done during the 1" poly pipe run or back near the Power Unit. Tighten the bracket liquid-tite fittings so that the 1" poly pipe is squeezed and water cannot leak around the 1" poly pipe.

If you are concerned about subsidence and/or kinking, you may prefer to use a heavier 1-1/2" double run of PVC flex pipe. To accomplish this, simply substitute the two couplings provided with the two (2) liquid-tite fittings threaded into the PVC bracket, apply Teflon Tape to the couplings, and glue in the 1-1/2" PVC flex pipe (refer to Photo 4.A.2).



NOTE: The pool builder/installer must decide if they will be using 1" poly pipe or 1-1/2" PVC flex pipe BEFORE spraying gunite. Once the 1" poly pipe or 1-1/2" PVC flex pipe has been run, cut, and trenched, the gunite can be sprayed.

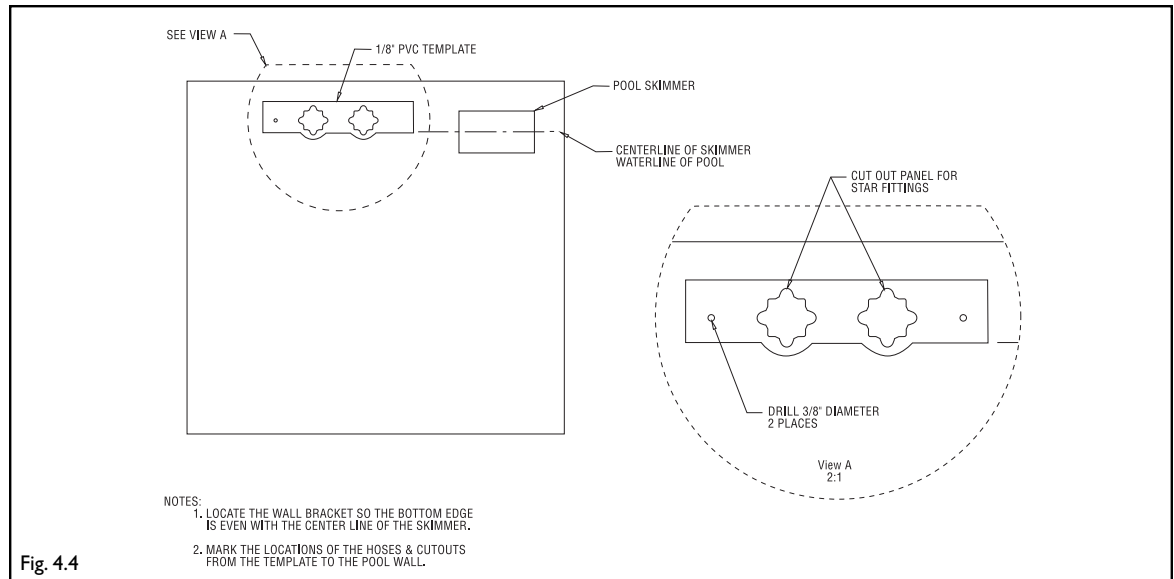
If installing the provided 1" poly pipe (standard installation), the Wall Mount Fastlane ships with two (2) 24' 6" rolls of 1" poly pipe. From the rear side of the pool, feed each 1" poly pipe into the liquid-tite fittings and tighten the cord grip on the 1" poly pipe so that no water will pass between the 1" poly pipe and the liquid-tite fitting. Unroll the 1" poly pipe to the location where the Power Unit will be located. The 1" poly pipe is 6" shorter than the standard length of hydraulic hoses provided. As you run the 1" poly pipe, be certain it does not kink. To ensure you have sufficient lengths of hydraulic hoses to make the necessary connections to the Power Unit, cut off approximately 3' of each 1" poly pipe. The 1" poly pipe will need to exit the ground near the Power Unit. If you find the 1" poly pipe is not long enough to reach the Power Unit, a junction box and additional hydraulic hoses will need to be ordered and installed. In this case, **DO NOT CUT** the length of the 1" poly pipe. Refer to Section 5 for additional information.

If installing the 1-1/2" PVC flex pipe, remove the two (2) 1-1/4" liquid-tite fittings from the wall mount bracket. Thread and adhere with Teflon tape the two (2) 1-1/2" NPT male/slip female PVC fittings into the wall mount bracket. Unroll the 1-1/2" PVC flex pipe from the wall mount bracket to the Power Unit. The PVC flex pipe should exit the ground near the Power Unit. Each section of the PVC flex pipe should be no longer than 21 feet. This will leave enough hydraulic hose to connect to the Power Unit. If you find that 21 feet of the PVC flex pipe is not long enough to reach the Power Unit, a junction box and additional hydraulic hoses will need to be ordered and installed. Refer to Section 5 for additional information.

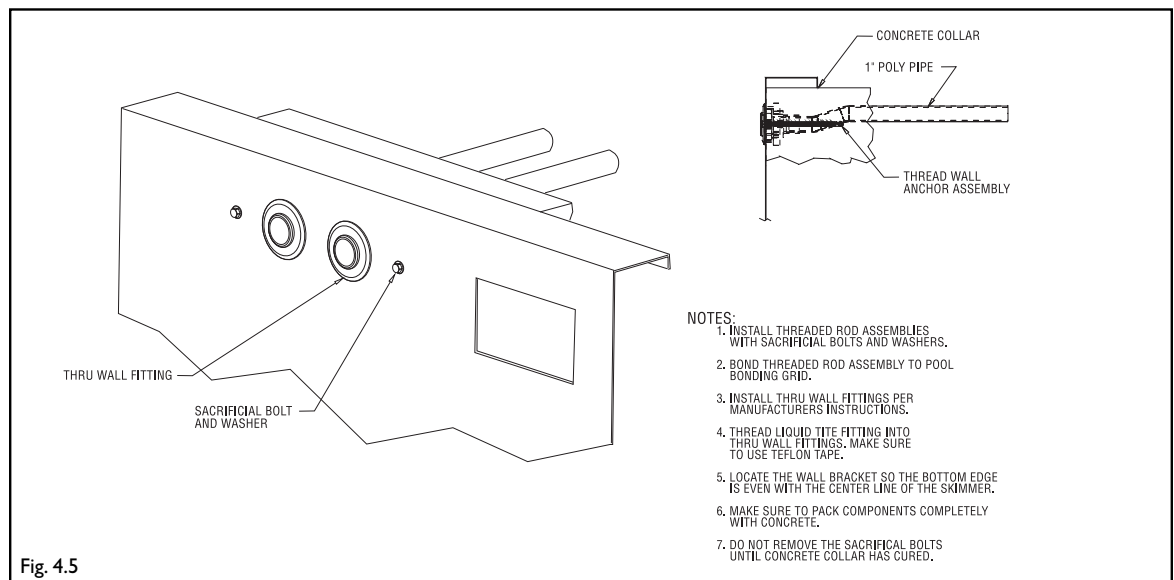
4.B. Steel/Polymer Panel Pool with a Vinyl Liner

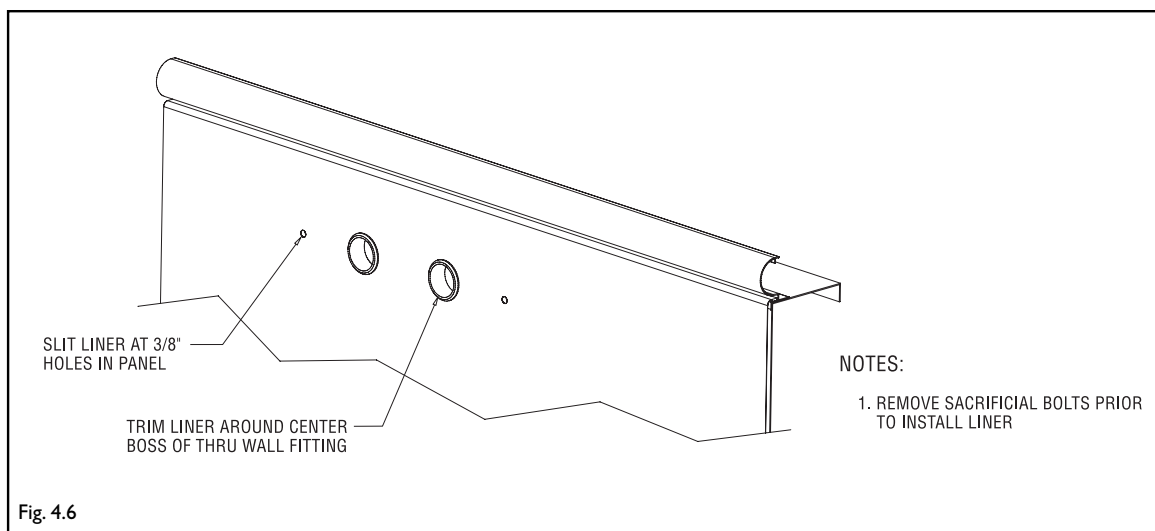
If the pool being constructed is steel/polymer panel with a vinyl liner, please follow the instructions below.

Remove the star thru-wall fittings and threaded rod pieces with hex coupling nut attachments from the 1/8"-thick, grey PVC template. Position the PVC template where the Fastlane will attach to the pool wall and align the bottom of the template with the expected water level in the pool (which will typically be located at the centerline of the skimmer) as shown in Figure 4.4. Use duct tape, perhaps wrapped over the top flange, to temporarily adhere the PVC template to the pool wall. Be certain that the PVC template is level in the pool. Trace the outline of the star thru-wall fittings and threaded rod hole penetrations that are cut in the PVC template onto the pool wall. Remove the duct-taped PVC template from the pool wall.



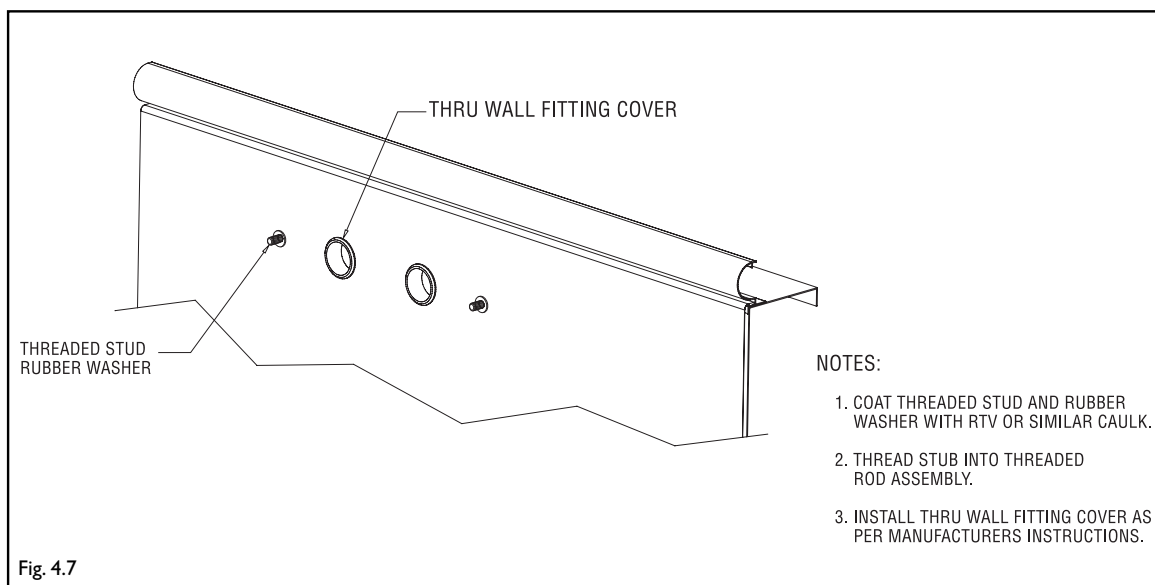
Cut (or punch) the openings for the star thru-wall fittings and threaded rod holes. Install the star thru-wall fittings with the holes for the cover at 12, 3, 6 and 9 (clock positions). Choose the appropriate adapters to thread into the back of the star thru-wall fittings for the type of conduit that will be used for running the hydraulic hoses from the pool to the Power Unit. Use the provided 1" poly pipe with liquid-tite fittings or a standard 1-1/2" PVC flex pipe with the provided 1-1/2" couplings. Refer to Section 5 for length of 1' poly pipe or 1-1/2" PVC flex pipe. The threaded rod with hex coupling assembly must now be tightened against the backside of the pool wall. The 3/8" jam nuts should be fastened on the threaded rod so that half of the hex coupling is threaded onto the rod and the other half facing the poolside remains empty. Use the sacrificial 3/8" bolts and washers to thread into the hex coupling from the inside of the pool through the hole that was previously drilled in the wall as shown in Figure 4.5. Tighten the bolts to secure the assembly to the rear of the pool wall.





If using rebar in the pool's collar, tie and bond the bent pieces of threaded rod into the bonded rebar grid. If no rebar is being used, be sure to bond the threaded rod to the pool's bonding grid.

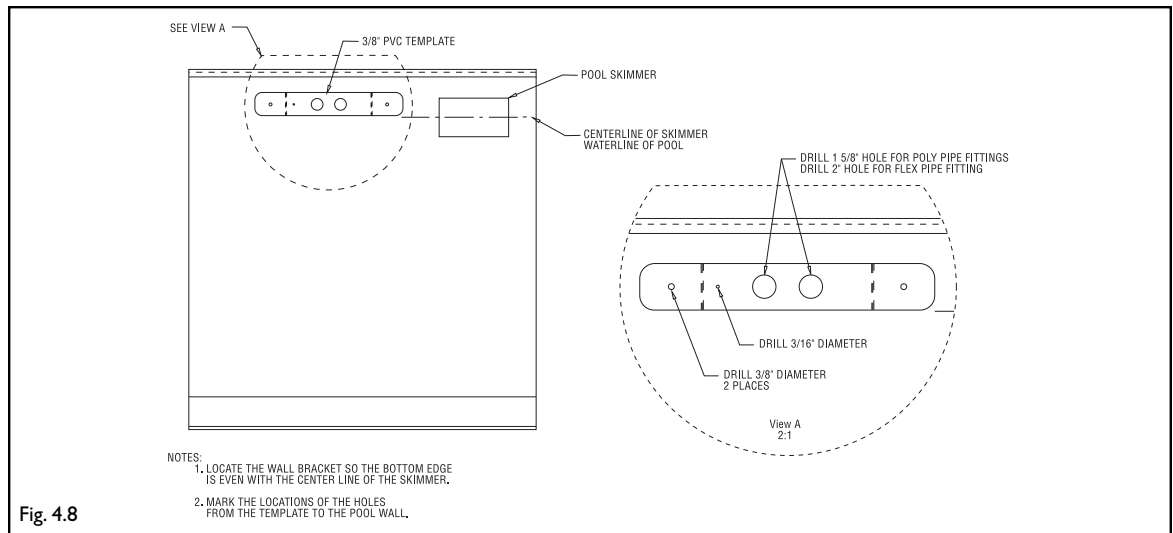
Pour the concrete collar around the top flange of the pool securely encasing the threaded rod assemblies and conduit adapters in place. Even if a bond beam is not being poured for the pool, it is essential for the operation of the Fastlane that this assembly be securely anchored in concrete. After the concrete has cured, remove the 3/8" bolts and install the pool liner. **Note:** Before beginning the liner installation, be sure to note the orientation of the star thru-wall holes at 12, 3, 6 and 9 (clock positions) as they will be hidden once the liner is hung. (Refer to Figure 4.6.) Make sure there is some water in the bottom of the pool, giving weight to the liner and pulling it tight, before the holes for the star thru-wall fittings and threaded rod pieces are cut. When the liner is tight enough, cut the holes. **Note:** Keep the holes for the threaded rod as small as possible. Attach the faceplate to the star thru-wall fittings, coat the threaded stud and rubber washer with RTV or similar caulk, and thread the stub into the threaded rod assembly. (Refer to Figure 4.7.)



4.C. Fiberglass Pool Installation

If the pool being constructed is fiberglass, please follow the instructions below.

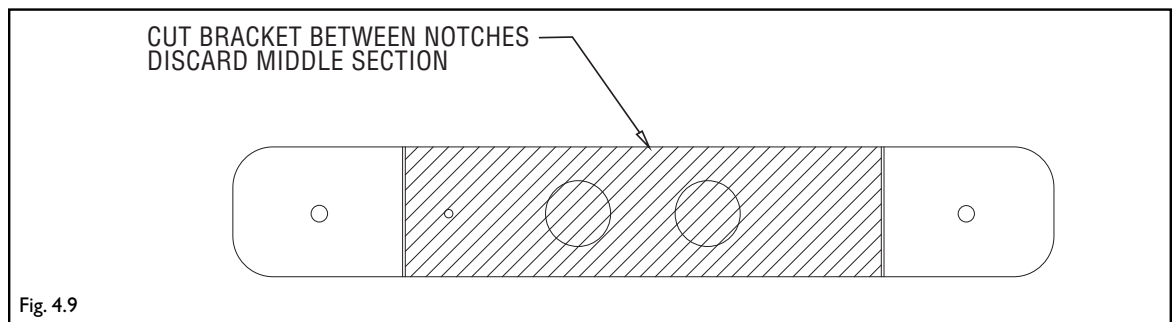
Remove the liquid-tite fittings, bonding lug assembly, and threaded rod pieces from the 3/8"-thick, grey PVC bracket plate which serves as a template. Position the PVC template where the Fastlane will attach to the pool wall and align the bottom of the PVC template with the expected water level in the pool (which will typically be located at the centerline of the skimmer). Refer to Figure 4.8. Use duct tape, perhaps wrapped over the top flange, to temporarily adhere the PVC template to the pool wall. Be certain that the PVC template is level in the pool. Trace the outline of the liquid-tite fittings, bonding lug, and threaded rod hole penetrations that are cut in the PVC bracket onto the pool wall.



Remove the duct-taped PVC template from the pool wall. Drill the openings for the liquid-tite fittings, bonding lugs and threaded rod holes. Determine if the provided 1" poly pipe or 1-1/2" PVC flex pipe will be used as conduit in which to run the hydraulic hoses from the pool to the Power Unit.

If using the provided 1" poly pipe:

- From the rear of the pool, attach the liquid-tite fitting to the fiberglass pool wall and firmly tighten it to the pool wall. Silicone may be used to get a tight seal.
- Feed the 1" poly pipe into the liquid-tite fittings from the rear of the pool, and tighten the fittings on the poly pipe (from the rear of the pool) to prevent water from passing between the poly pipe and the fittings.
- Cut the ends of the 3/8"-thick, grey PVC bracket plate along the score lines. These two ends will act as washer/bolt heads against the back of the pool wall. Discard the center section as shown in Figure 4.9.



- Thread the 3/8" threaded rod into the holes in the cut off end pieces, so that once permanently installed, 1-1/4" to 1-1/2" of threaded rod will penetrate beyond the pool wall surface. Refer to Figure 4.10. To help prevent cross threading, thoroughly clean the exposed end of the threaded rods of any excess fiberglass before threading nuts onto the threaded rods.
- Attach the bonding lug to the rear of the pool and thread the screw for the bonding lug through the hole in the pool wall. The bonding lug screw should penetrate at least a 1/2" into the pool wall when permanently installed. A #8 or larger, solid copper bonding wire must be connected from the pool bonding grid to the bonding lug located on the back of the wall mount bracket
- Apply the provided silicone adhesive to the side of the PVC bracket plate that will mate against the pool wall to ensure that the seal is watertight.
- Feed the poolside ends of the threaded rods through the holes drilled in the fiberglass pool wall, and using the provided washers and jam nuts, secure the rod tightly to the pool wall. Leave nuts and washers attached until silicone cures.

If using the 1-1/2" PVC flex pipe:

- The bracket will NOT be cut into three pieces.
- Thread and adhere with Teflon tape the provided couplings into the threaded holes in the 3/8"-thick, grey PVC bracket.
- Glue the necessary length of PVC flex pipe to the couplings. Refer to Section 5.

- Thread the 3/8" threaded rod into the holes in the bracket, so that once the PVC bracket plate is permanently installed, 1-1/4" to 1-1/2" of threaded rod will penetrate beyond the pool wall surface. Refer to Figure 4.10. To help prevent cross threading, thoroughly clean the exposed thread of any excess fiberglass before threading nuts onto the threaded rods.
- Attach the bonding lug to the rear of the pool, and thread the screw for the bonding lug through the hole in the pool wall. It should penetrate at least a 1/2" into the pool wall when permanently installed.
- Apply the provided silicone adhesive to the side of the PVC bracket plate that will mate against the pool wall to ensure that the seal is watertight.
- Feed the pool side ends of the threaded rods and bonding lug screw through the holes drilled in the fiberglass pool wall, and using the provided washers and jam nuts, secure the rod tightly to the pool wall and leave until silicone cures.
- Once installed, the adapter threaded into the 3/8" PVC bracket plate should be seen from inside the pool through the holes that are drilled in the pool wall.

Once the bracket is securely attached to the rear of the pool wall, tie the bent pieces of threaded rod into the bonded rebar grid. If no rebar is being used, be sure to bond the threaded rod to other metallic pool items and pool equipment. Attach a bonding wire to the bonding lug on the back of the bracket, and be sure to bond the threaded rod to the pool's bonding grid.

Pour the concrete collar around the top flange of the pool, securely encasing the threaded rod assemblies and conduit (with possible adapters) in place. Even if a bond beam is not being poured for the pool, it is essential for the operation of the Fastlane that this assembly be securely anchored in concrete. Refer to Figure 4.10. Only when the concrete has cured is it okay to remove the washers and jam nuts and install the Fastlane. **Note: Do not throw away these washers and nuts, because they will again be used to anchor the Fastlane to the pool wall.**

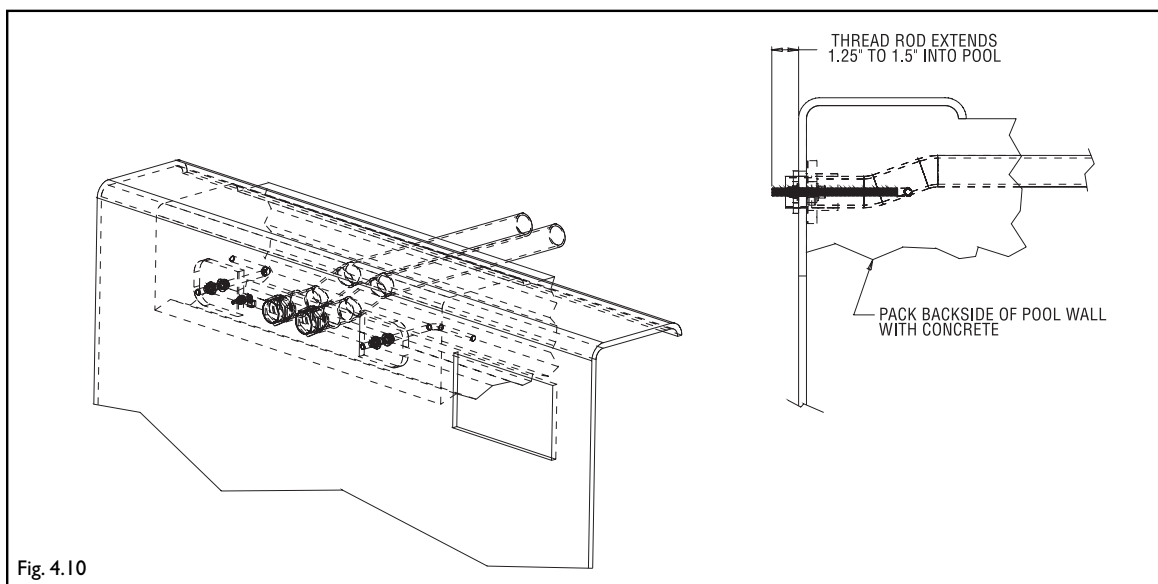


Fig. 4.10

Section 5

JUNCTION BOX AND 1/2" RUN HOSES (OPTIONAL)

The wall mount bracket must be attached on the pool wall as explained in the installation instructions in Section 4. Attached to this bracket are two (2) lengths of 1" poly pipe or 1-1/2" PVC flex pipe that run back under the deck and carry two (2) hydraulic hoses.

If the hydraulic hose runs back to the Power Unit are less than 25', it is not necessary to step up to 1/2" run hose to reduce pressure loss. Instead, the 3/8" hydraulic hose can run directly to the Power Unit in the protective conduit.

If the hydraulic hose runs are greater than 25', in order to reduce pressure loss and potential reduction in speed, a junction box must be used. It is at the junction box where a step up to 1/2" run hose occurs. The hydraulic hose from the Fastlane Swim Unit to the junction box is 3/8" and the run hose from the junction box to the Power Unit is 1/2". The junction box must be located at the elevation equal to or higher than the pool deck.

Section 5**JUNCTION BOX AND 1/2" RUN HOSES (OPTIONAL)**

Junction Box Kit (optional) includes:

- One (1) junction box with feet
- Four (4) 1-1/2" NPT male/slip female PVC fittings
- Roll of anti-corrosion tape
- Two (2) 1-1/2" liquid-tite fittings
- Six (6) 1-1/2" locknuts

If installing the optional junction box with the 1" poly pipe:

- The Fastlane ships with two (2) 24' 6" rolls of 1" poly pipe. Do NOT cut down the length of this 1" poly pipe.
- Install the two (2) 1-1/2" liquid-tite fittings in the same side of the junction box.
- Feed the 1" poly pipe into the liquid-tite fittings and tighten the fittings so that no water will pass between the 1" poly pipe and the fittings.
- To get from the junction box to the Power Unit, run 1-1/2" PVC flex pipe.
- Roll two (2) lengths of PVC flex pipe from the junction box to the Power Unit. The PVC flex pipe should exit near the Power Unit.
- Measure the length of PVC flex pipe. Your 1/2" run hose will need to be AT LEAST 4 feet longer than the length of the PVC flex pipe. Order your 1/2" run hoses at this time by calling our Customer Service Department at 800-910-2714.
- Glue the 1-1/2" NPT male/slip female fittings on the end of the PVC flex pipe that will connect to the junction box. Secure the fittings to the junction box with the provided lock nuts. The PVC flex pipe can be buried in a trench.
- Adapters to connect the 1/2" run hoses to the 3/8" hoses attached to the Fastlane have been provided. They can be found in the 1/2" run hose box.
- If desired, the junction box can be anchored by attaching the feet included with the kit.

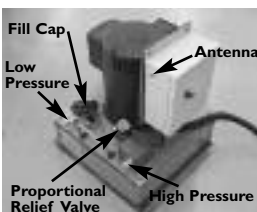
If installing the optional junction box with the 1-1/2" PVC flex pipe:

- The 1-1/2" PVC flex pipe will need to be cut to 24' 6" from the wall mount bracket to the junction box.
- Glue the 1-1/2" NPT male/slip female fittings on the end of the PVC flex pipe that will connect to the junction box. Secure the fittings to the junction box with the provided lock nuts.
- To get from the junction box to the Power Unit, run 1-1/2" PVC flex pipe.
- Unroll the two (2) lengths of PVC flex pipe from the junction box to the Power Unit. The PVC flex pipe should exit the ground next to the Power Unit.
- Measure the length of PVC flex pipe. Your 1/2" run hoses will need to be AT LEAST 4 feet longer than the length of the PVC flex pipe. Order your 1/2" run hoses at this time by calling our Customer Service Department at 800-910-2714.
- Glue the 1-1/2" NPT male/slip female fittings on the end of the PVC flex pipe that will connect to the junction box. Secure the fittings to the junction box with the provided lock nuts. The PVC flex pipe can be buried in a trench.
- Adapters to connect the 1/2" run hoses to the 3/8" hoses attached to the Fastlane have been provided. They can be found in the run hose box.
- If desired, the junction box can be anchored by attaching the feet included with the kit.

Section 6**INSTALLATION AND TESTING OF THE HYDRAULIC POWER UNIT**

6.1

6.1 PLACEMENT CONSIDERATIONS: The Power Unit should be placed on a flat, level surface, preferably not on wet ground. If placing outside, it is recommended the Outdoor Power Unit with Weather Guard be purchased (see Fig 6.1), but should not be subject to driving rain. If placing indoors and at a level below the pool deck, such as a basement, a floor drain is mandatory to accommodate the unlikely event of a hole developing in the hydraulic hose creating a siphon. Whether placed indoors or out, this is an air-cooled unit and must have ample ventilation. Therefore, a minimum of 12" air space must be provided on all sides of the Power Unit motor. In addition, while frequent access is not required, it is imperative the Power Unit be accessible.



6.3

6.2 Carefully remove the Power Unit from the packaging. **Note:** The Power Unit is very heavy. To remove the Power Unit open box top flaps, lay box on its side, open box bottom flaps, and slide the Power Unit out of the box sideways on the bottom foam.

6.3 Place the Power Unit in the selected position and verify that the hose connections are pointed in the direction you desire.

6.4 Have an electrician make the electrical connections using the whip provided. Make this connection by hard wiring to a disconnect or using an appropriate lock tight plug and socket. The Power Unit requires single-phase 220-volt, 30-amp GFCI-protected power. Verify proper incoming voltage and wiring. Refer to Section 7, "Power Unit Electrical Wiring." Note: The white wire will not be used in this application (no neutral is required). For UK and international electrical requirements, please refer to Section

Section 6

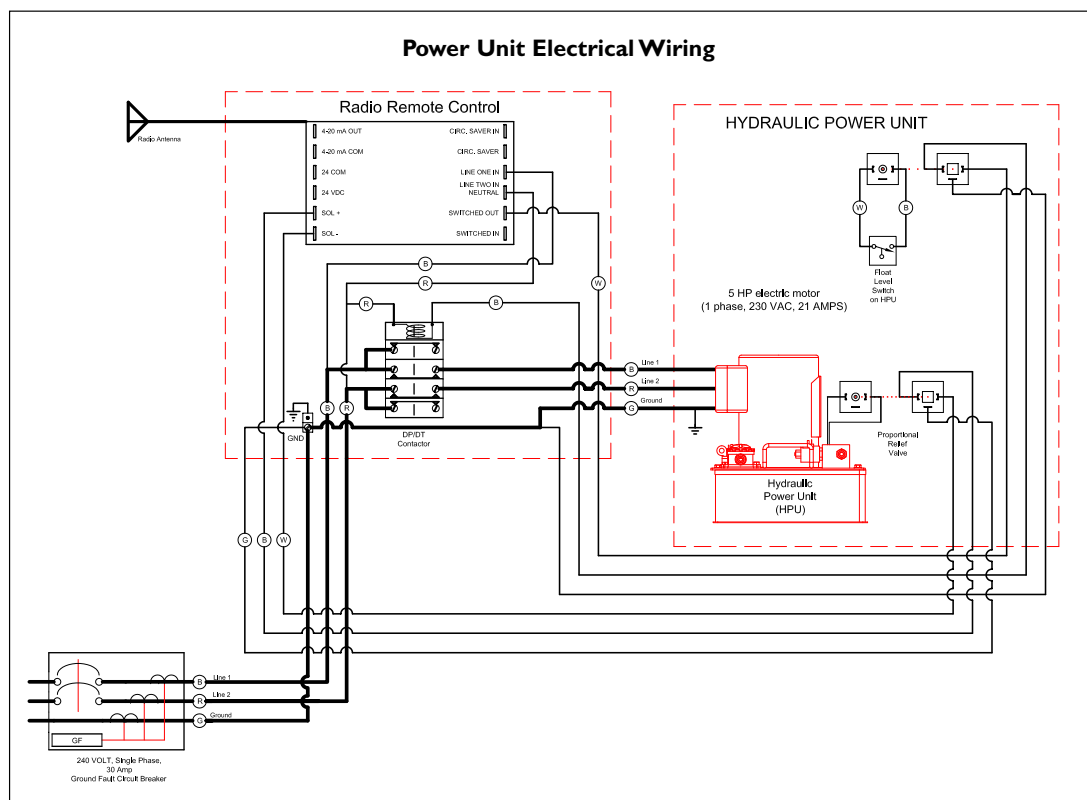
INSTALLATION AND TESTING OF THE HYDRAULIC POWER UNIT

8.

6.5 Turn the circuit breaker for the Power Unit OFF. Secure the test caps to the low and high pressure connections on the Power Unit. Remove the oil filter by lifting it out of the fill opening. Fill the Power Unit with the approximately four (4) gallons of hydraulic fluid provided. (The fill cap is at the low pressure fitting.) Once filled with oil, replace the oil filter and cap and press firmly to ensure proper seating of the filter. **Do not run unit without test caps being installed.** Turn circuit breaker on. Install antenna and briefly test the Power Unit operation using the remote control. **Note:** Continued operation with the test plugs installed may result in overheating the Power Unit.

Section 7

POWER UNIT ELECTRICAL WIRING



Section 8

ELECTRICAL REQUIREMENTS FOR UK AND OTHER INTERNATIONAL COUNTRIES

The unique design of the Fastlane facilitates sales to UK and international customers. The Fastlane is shipped in kit form for easy assembly and installation into any new conventional pool following the detailed instructions provided.

The Fastlane is ETL marked and CE listed.

The Power Unit circuit must be RCD (GFI) protected. The MCB (breaker) that operates the hydraulic Power Unit should be C-type or motor-rated.

United States wire color-coding is different than international color-coding. The following chart identifies the color-coding used in the United States as it relates to the wire type. In addition, the wires of the controller have a short, colored sleeve wrapped around them to conform to the international color codes.

US Wiring Color	Wire Type	Wire Sleeve Color
Black, Red, or Blue	Live or Hot	Brown
White	Neutral	Blue
Green	Ground	Yellow with Green Stripe

Should you have any questions, please call the Customer Service Department at 0800-028-1056 (UK Only), 610-497-4538 (Direct), or email us at poolhelp@endlesspools.com.

Section 9

ASSEMBLY OF THE WALL MOUNT SWIM UNIT

- 9.1** Carefully unpack the swim unit from its boxes. Make sure to remove any hardware packs from the boxes as well. The packaging can be collapsed and used as a protective surface upon which to assemble the Fastlane. The foam packing material can be used to wedge under the base to prevent it from tipping over.
- 9.2** Take care when handling or working with any of the stainless steel components of the swim unit. The ends can be sharp. The first step is to remove the two circular end caps from each side of the cylindrical base. There are 3 arced cover strips around the perimeter of each end cap. Unthread the nine screws that secure the cover strips (3 screws per cover strip). Carefully set each end cap aside (Fig 9.1).

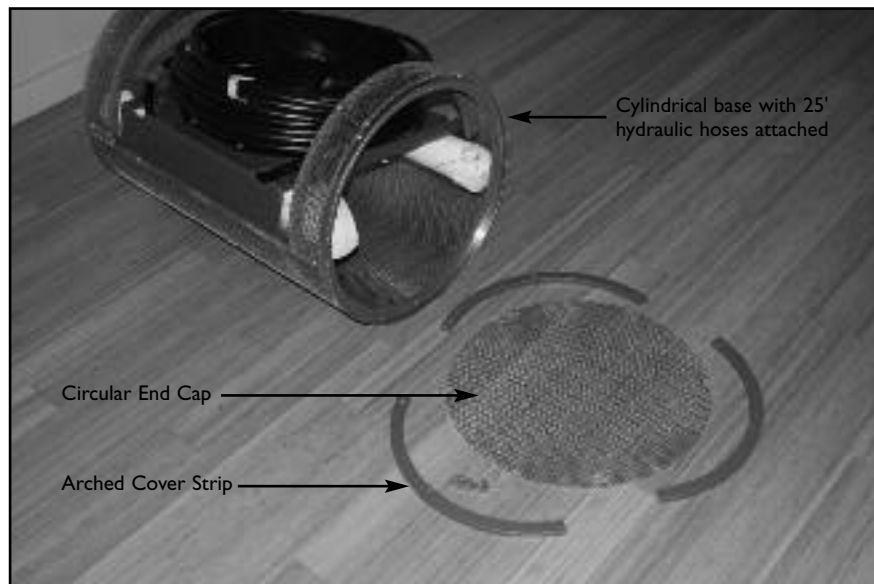


Fig. 9.1

- 9.3** Uncoil the two lengths of hydraulic hose that are attached to the cylindrical base. Make sure that the hoses are seated into their respective notches in the backside of the base (Fig 9.2).

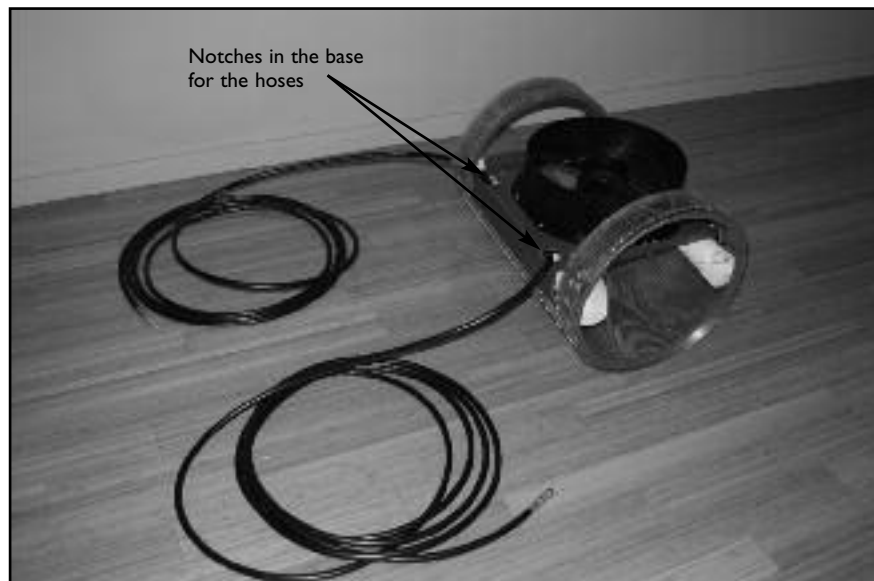


Fig. 9.2

Section 9

ASSEMBLY OF THE WALL MOUNT SWIM UNIT

- 9.4** Remove the throat from the upper housing. There are two screws on each side of the throat. Pull the throat off of the housing and set it aside. Pull the vertical water-conditioning grill up and out of the housing. Pull the horizontal grill out of its track and remove from the housing. Make sure to remove and discard the wood 2x4 spacer from the bottom of the housing before proceeding (Fig 9.3).

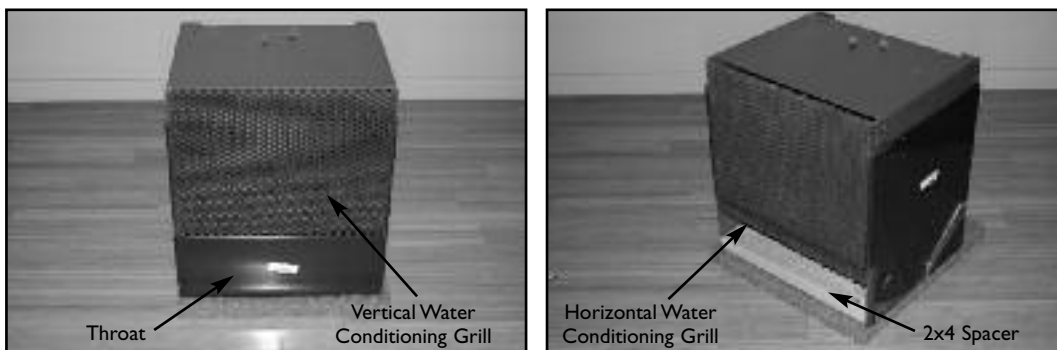


Fig. 9.3

- 9.5** Carefully remove the protective film encasing the upper housing. Place the upper housing into the opening of the cylindrical base (Fig 9.4). The hydraulic hoses connected to the base should be aligned with the back of the upper housing. Make sure that the stainless steel bonding wire attached to the motor mount is positioned inside of the upper housing.

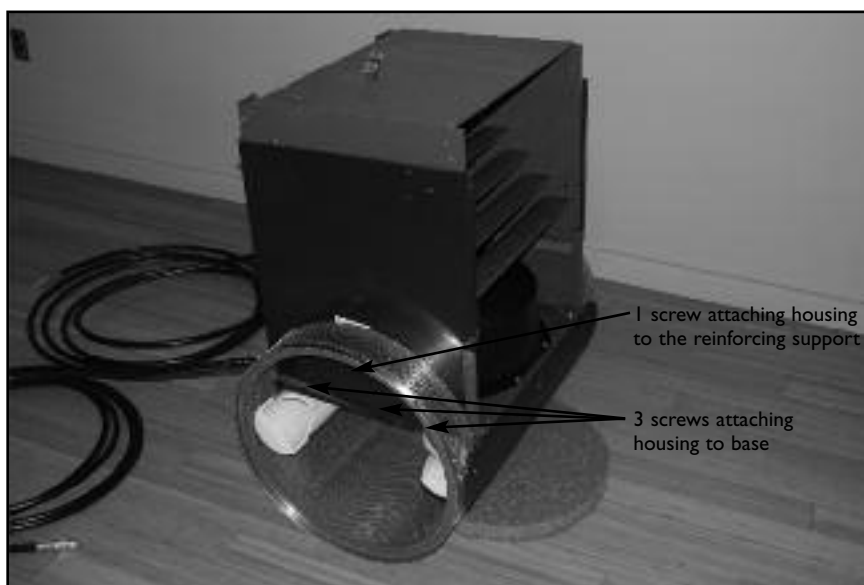


Fig. 9.4

- 9.6** Use the provided stainless steel machine screws to attach the upper housing to the base. There will be 4 screws per side (total of 8). On each side of the housing, there will be 3 screws securing the upper housing to PVC motor mount support and 1 screw attaching the stainless steel reinforcing support to the housing just above the 3 previous screws (Fig 9.4).
- 9.7** Carefully lay the Fastlane onto its front face. Run the hydraulic hoses up the back of the upper housing. The two hat channels will be placed over the hydraulic hoses. Make sure that the mounting hole in the end of the hat channel is facing up and that the bottom of the hat channel has been inserted into the notch in the cylindrical base. Use the provided 3/4" machine screws to attach the hat channels to the upper housing. There will be eight screws per hat channel (Fig 9.5).

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ASSEMBLY OF THE WALL MOUNT SWIM UNIT

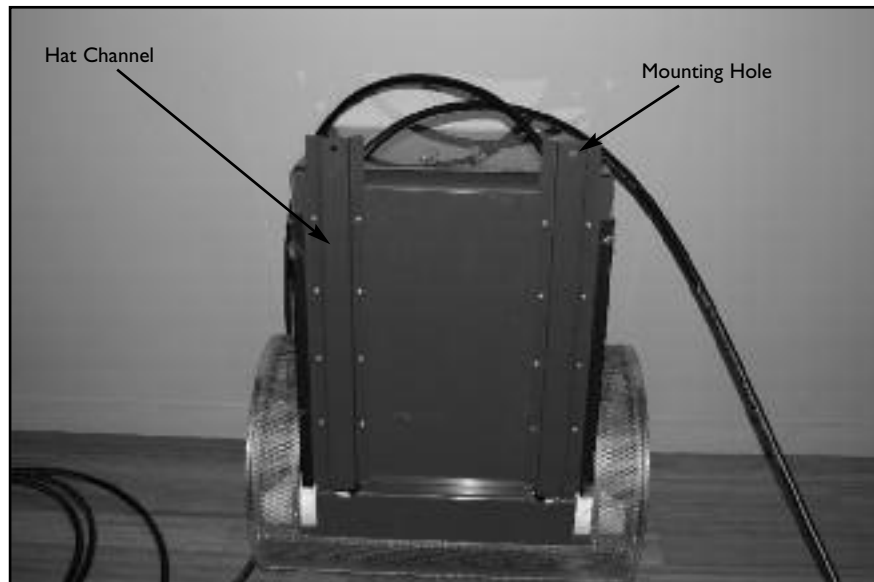


Fig. 9.5

- 9.8** Pull any excess hose out of the hat channel. Attach the two hoses to the top of the upper housing. There are 2 green hose clamps attached to the top of the housing. The screws that are securing the clamps to the housing will have to be removed in order to secure the hoses to the clamps. The hoses should cross over one another prior to attaching to the housing (Fig 9.6).



Fig. 9.6

- 9.9** Run the stainless steel wire attached to the motor mount up and through the 3rd turning vane (from the bottom) inside the upper housing. The wire should be on the left side of the housing as you are facing the unit (Fig 9.7).
- 9.10** Install the stainless steel grab bar to the upper housing using the provided machine screws and lock nuts. Make sure to place the stainless steel wire (from the motor mount in the base) around the bottom screw on the left side before tightening down on the nut. Place the second stainless steel wire (that exits the top rear of the upper housing) around another screw before tightening down on the nut (Fig 9.7).

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ASSEMBLY OF THE WALL MOUNT SWIM UNIT

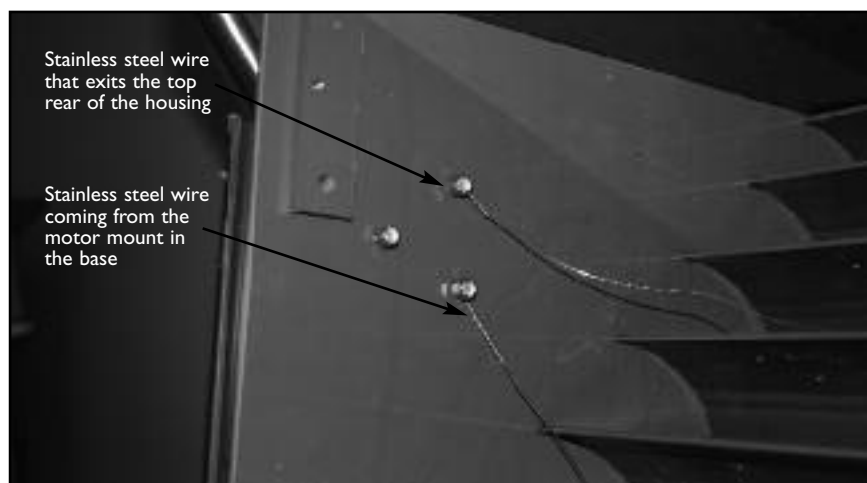


Fig. 9.7

- 9.11** Slide the horizontal water-conditioning grill back into its track inside the housing. The horizontal grill is the wider of the two grills (Fig 9.8).

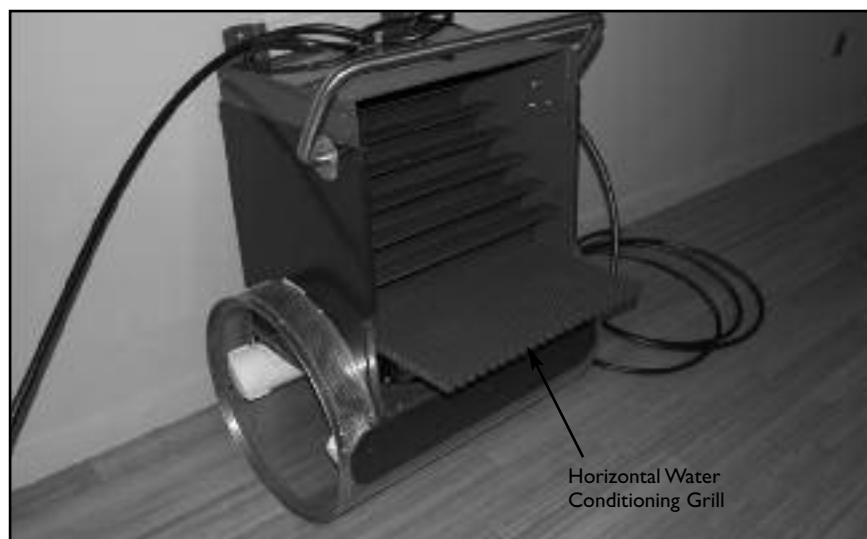


Fig. 9.8

- 9.12** Reattach the throat (removed in step 3) to the upper housing. Again, there will be 2 screws on either side of the throat (total of 4).

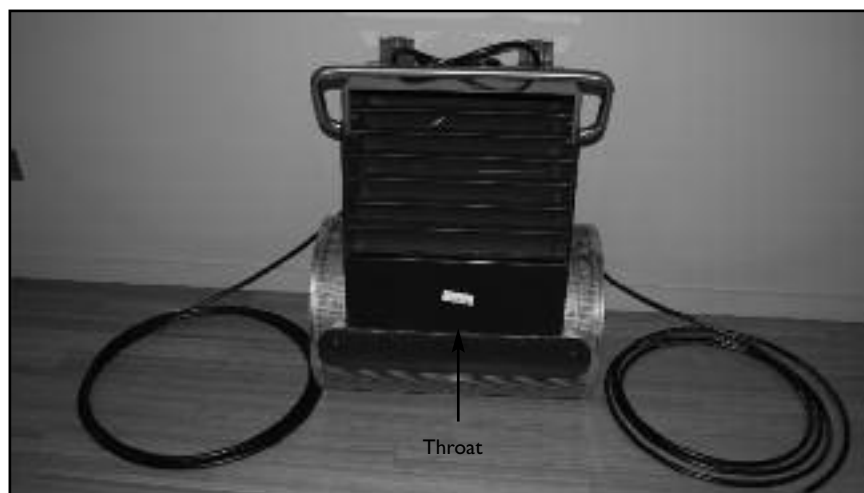


Fig. 9.9

Section 9

ASSEMBLY OF THE WALL MOUNT SWIM UNIT

9.13 Slide the vertical water-conditioning grill back down into the housing (Fig 9.10).



Fig. 9.10

9.14 Re-install the circular end caps. Make sure that the “smooth” surface of the end caps are facing out. Align the end caps to the internal PVC supports so that the holes in the internal supports are aligned with holes in the end caps. Position the arched cover strips over the end caps, making sure to align the hole in the arched cover strips with the holes in the stainless end caps and the internal PVC supports. Install the nine screws (3 per cover strip) that were removed in step 2. Repeat for the remaining end cap (Fig 9.11).

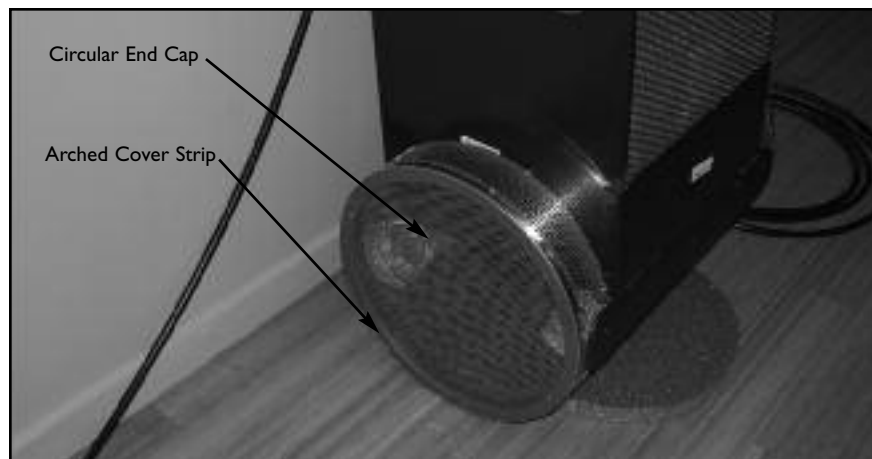


Fig. 9.11

9.15 Once the Fastlane is installed in the pool, place the housing lid onto the housing and use the provided screws to attach. There will be three screws per side, for a total of six (Fig 9.12).

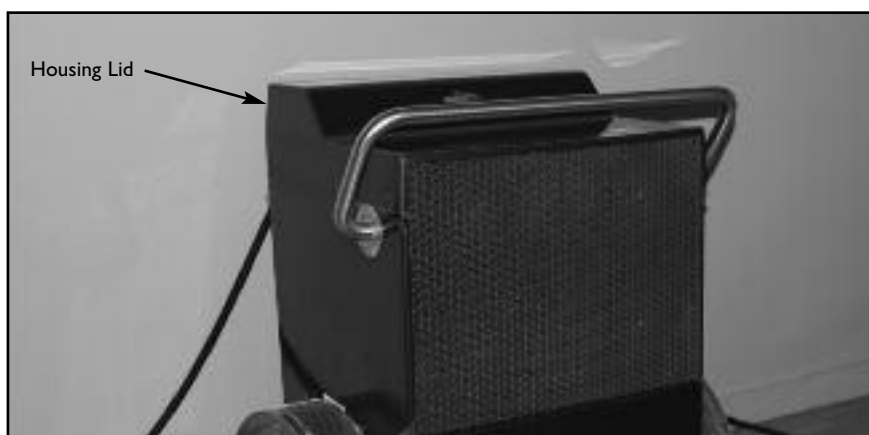


Fig. 9.12

Section 10

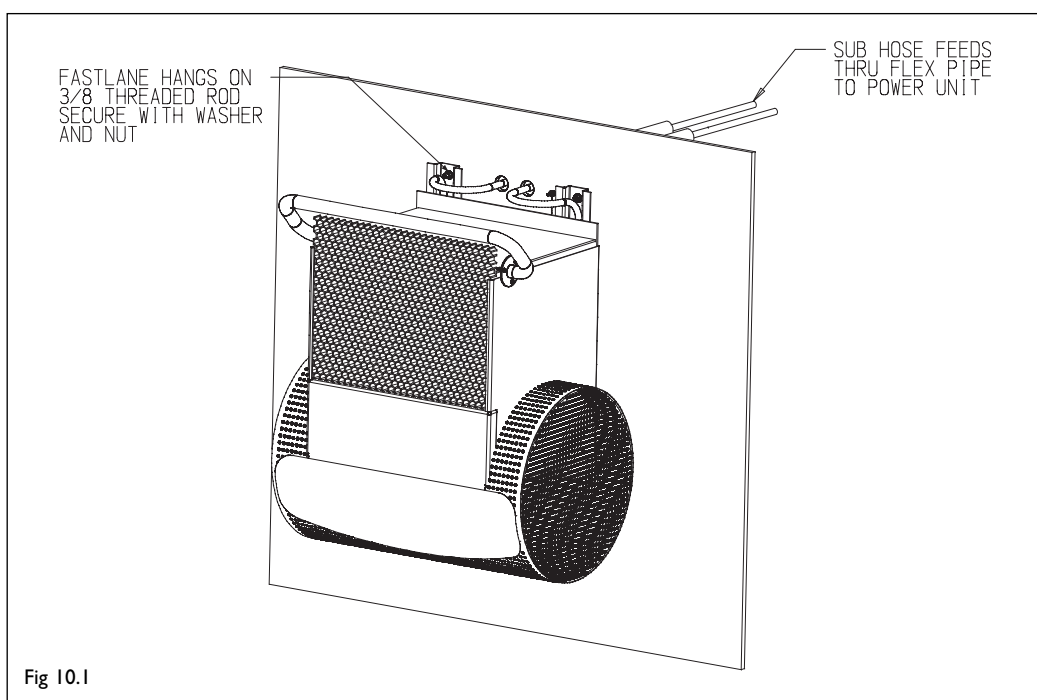
INSTALLATION OF YOUR FASTLANE

- 10.1** Fill the pool up with water. The water line should be halfway up the skimmer along the bottom of the wall mount bracket and 1-1/2" below the two (2) mounting rods.
- 10.2** Using two people, one on each side of the Fastlane Swim Unit, place one hand on the side of the grab rail and the other hand on the back of the Swim Unit. Carefully, lift the Swim Unit and gently lower it into the pool. **NOTE:** Be watchful not to scratch the Swim Unit on the stainless steel, threaded rods protruding from the wall mount bracket.
- 10.3** Hang the hydraulic hoses down over the front of the Fastlane Swim Unit. Match the holes on the top of the "hat" channel of the housing with the stainless steel, threaded rods in the wall mount bracket. Secure tightly with the two (2) 3/8" stainless steel flat washers, the two (2) lock washers, and the two (2) nuts provided (one for each rod) as shown in Figure 10.1. **Attach the bonding wire to the bonding lug set located on the wall mount bracket to bond the entire swim unit to the pool.**
- 10.4** Once the Fastlane is secured to the wall mount bracket, feed one hydraulic hose through one of the 1" poly pipes until all of the hose is through. Repeat for the second hydraulic hose. Install the Fastlane lid (see Section 9.15).
- 10.5** Remove the test plug(s) from the low and high-pressure connections on the Power Unit. Connect the hydraulic hoses to the Power Unit. The low-pressure hose has red tape on the end. Connect the low-pressure hose to the port at the fill cap and the high-pressure hose to the port with the proportional relief valve. (Refer to Photo 6.3 on page 9)
- 10.6** You are now ready to start up your Fastlane. Take the remote control used during the testing process in Section 6 and press and hold the **ON/OFF** button turning on the Fastlane and producing a current.

The Fastlane features 52 incremental steps in speed. Press and release the **FASTER** button to increase the speed of the current one step at a time. Alternatively, press and continue to hold the **FASTER** button to ramp up the speed until the button is released or the maximum speed is achieved. Reduce the speed in the same manner using the **SLOWER** button.

Turn off the Fastlane by again pressing the **ON/OFF** button.

The Power Unit remote control is equipped with an automatic timer shutting off the system 30 minutes after receiving its last command. Because the Fastlane "remembers" the speed at which it was turned off, it will return to that same pace when it is turned back on.



Section 11**GENERAL INFORMATION**

Once installed, the Fastlane will provide years of exercise and fun with minimal maintenance. Clean the intake grills of leaves as needed and wipe down the stainless steel cylindrical base and grab rail with warm water, a Scotch Brite pad, and brisk rubbing. Clean the acrylic housing with any typical non-ammonia, non-abrasive kitchen cleanser. Periodically, check all electrical and ground wire connections and test the GFCI circuit breaker for proper function.

It is important for the long-term operation of your Fastlane that your pool water be properly balanced and in accordance with normal pool industry standards. In addition, it is imperative that the Fastlane be bonded to the pool bonding grid.

Endless Pools, Inc. is an industry leader in customer service, should you ever have questions or concerns about your Fastlane, please contact our Customer Service Department at 800-910-2714.

Section 12**SCHEDULED MAINTENANCE**

- 12.1 Hydraulic Motor and Fluid Maintenance.** We recommend the hydraulic motor, which is located in your swim unit and submerged underwater, be replaced after four years of usage. We also recommend changing the non-food grade, biodegradable vegetable oil and filter in the Power Unit after every 500 hours of use.
- 12.2 Grill Cleaning.** Should you perceive a reduction in speed of your Fastlane, it may be caused by a reduction in water flow due to a blockage of the inlet assembly of the cylindrical base. Because the underside of your Fastlane will be sucking in water, it may occasionally become necessary to clean the grill of any debris or leaves that may have been in your pool when the Fastlane was in operation. With the Fastlane unit turned off, this is very easy to accomplish while in the pool.
- 12.3 Cold Weather Maintenance.** At the end of the swimming season, it is recommended the Fastlane Swim Unit be removed from the swimming pool and winterized. A winterizing kit for the Fastlane can be purchased from Customer Service. For specific instructions, please contact our Customer Service Department at 800-910-2714.
- 12.4 Use of Salt-chlorine generators.** Placing a Fastlane in a pool sanitized using a salt-chlorine generator creates increased risk of a hydraulic system failure and oil leaks. Any Fastlane placed in this type of environment must be properly bonded, and water chemistry must be closely monitored. As stated in our warranty, pH levels must be maintained between 7.4 and 7.8, total alkalinity between 80 and 120 ppm, salt chlorine levels below 4000 ppm, and total dissolved solids below 7000 ppm. Failure to properly bond the Fastlane or maintain proper water chemistry will void the warranty.

If you are using a salt-chlorine generator, please complete the following tasks:

- Remove and inspect your Fastlane unit annually. Once removed, rinse the Fastlane with fresh water before storing for the off-season.
- Replace the underwater hydraulic motor and submersible hoses every two years.
- Ensure that the fluid level in your power unit is no more than one cup above the float level switch. This simple procedure ensures that any oil leak is minimized

Section 13**FASTLANE® BY ENDLESS POOLS, INC. WARRANTY**

Endless Pools, Inc. warrants to the original purchaser of Fastlane manufactured by us to be free from defects in material and workmanship under normal use for two years from purchase. OUR OBLIGATION UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPAIR OR EXCHANGE (AT OUR OPTION) OF ANY PART OR PARTS WHICH MAY THUS PROVE DEFECTIVE UNDER NORMAL USE WITHIN TWO YEARS FROM DATE OF PURCHASE BY THE ORIGINAL PURCHASER, AND WHICH OUR EXAMINATION SHALL DISCLOSE TO OUR SATISFACTION TO BE THUS DEFECTIVE. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND OF ALL OTHER OBLIGATIONS OR LIABILITIES FOR ALL DAMAGES DIRECT OR CONSEQUENTIAL TO PERSON, PROPERTY, OR BUSINESS WHETHER OR NOT OCCASIONED BY OUR NEGLIGENCE, AND WE NEITHER ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THIS FASTLANE. THIS WARRANTY SHALL NOT APPLY TO THIS FASTLANE OR ANY PART THEREOF, WHICH HAS BEEN SUBJECT TO ACCIDENT, NEGLIGENCE, FREEZING, IMPROPER INSTALLATION, ALTERATION, ABUSE, OR MISUSE. THIS INCLUDES, BUT IS NOT LIMITED, TO FLOW RESTRICTIONS OR OBSTRUCTIONS ON ALL WATER AND HYDRAULIC SYSTEMS AND NOT PROPERLY BONDING OR MAINTAINING PROPER WATER CHEMISTRY (pH level must be maintained between 7.4 and 7.8 and total alkalinity between 80 and 120 ppm. The total dissolved solids (TDS) must be no greater than 3,000 ppm). POOLS USING SALT CHLORINE GENERATORS REQUIRE ADDITIONAL MAINTENANCE. MAINTAIN A SALT CONTENT BELOW 4,000 ppm AND TDS WITH SALT BELOW 7,000 ppm. REMOVE THE FASTLANE ANNUALLY, RINSE WITH FRESH WATER AND INSPECT UNDERWATER HYDRAULIC MOTOR AND HOSE FITTINGS. SET THE HYDRAULIC FLUID LEVEL TO ONE CUP OVER THE FLOAT LEVEL SWITCH (CONTACT CUSTOMER SERVICE FOR DETAILED INSTRUCTIONS).

THE TERM "ORIGINAL PURCHASER", AS USED IN THIS WARRANTY, SHALL BE DEEMED TO MEAN THAT PERSON FOR WHOM THE FASTLANE WAS ORIGINALLY INSTALLED. THIS WARRANTY SHALL APPLY ONLY WITHIN THE BOUNDARIES OF THE CONTINENTAL UNITED STATES.

WE DO NOT WARRANT THIS MACHINE TO MEET THE REQUIREMENTS OF ANY SAFETY CODE OF ANY STATE, MUNICIPALITY, OR OTHER JURISDICTION. PURCHASER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE THEREOF, INCLUDING DAMAGE OR STAINING TO ANY POOL OR POOL DECK, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER MACHINES OR APPARATUS.

In order to claim under this warranty, original purchaser must promptly notify our Customer Service Department in writing of the existence of the claim and then follow our written instructions regarding the procedures for remedying the defect. Endless Pools, Inc. shall not be responsible for cartage, transportation, removal, and/or re-installation labor or any other such costs relating to performance of the warranty.

All orders are FOB Aston, PA. We will NOT be liable for any costs or losses due to changes in shipping schedules, or delivery times. It is the responsibility of the Customer to supply safe and proper site preparation, installation and operation for all Endless Pool Swimming Machines. This includes, but is not limited to, adequate drainage at any pool and/or equipment site, to control humidity, to post necessary safety signage and to ensure safe and proper use of all Endless Pool Swimming Machines. Customer shall be responsible for any and all building permits, fees, licenses, and authorizations necessary to comply with local building codes or requirements. Customer takes all responsibility for site preparation including, but not limited to, any slab or foundation. Any Endless Pools product installed above grade must be placed on a properly engineered structure, which is the responsibility of the customer.

In the event any portion of this warranty shall be deemed unenforceable by a court of law, the remainder of this warranty shall remain in full force and effect as if the voided portion were never included.

Endless Pools, Inc. 1601 Dutton Mill Rd, Aston, PA 19014 800-910-2714

